ACTION START-LIST FOR CEDAR RIVER CHINOOK POPULATION

Technical priorities from WRIA 8 Conservation Strategy are listed in bold. Land use, public outreach, and site specific actions are listed for each technical priority. Technical priorities are interrelated, and many actions address multiple technical priorities.

CEDAR MAINSTEM RECOMMENDATIONS (TIER 1)

Protect and restore forest cover and soil infiltrative capacity, and minimize increases in impervious surfaces, to maintain watershed function and hydrologic integrity and protect water quality.

Basinwide recommendations:

- Enlist help of builders practicing sustainable development to promote benefits of forest cover in protecting water quality. (*C706, C707, C720, C722*)
- Employ basinwide stewards to work with property owners, land trusts, and agencies in order to identify and secure forested, wetland, and riparian areas, and to encourage the best management practices for those held in private ownership. Encourage neighborhood and community protection associations to foster the ethic of voluntary stewardship and build bridges between property owners, agencies, and local governments. (*C703, C716, C720, C721*)

Within Urban Growth Area:

- Consistent with Growth Management Act, Renton and potential annexation areas should absorb most growth so that rural habitat resources can be protected; growth should be managed to minimize impacts on forest cover, water quality, and flows. (*C1*)
- In urban areas, protect remaining trees and encourage reforestation through street tree and urban forestry programs, tree protection regulations, landscaping incentives, and redevelopment. (*C3*)

Outside Urban Growth Area:

- Protection of forest cover in Tier 1 and Tier 2 subareas is a high priority land use action, so that existing levels of forest cover are not further degraded. King County should strictly enforce the clearing restrictions for rural areas adopted in 10/04 as part of the critical areas ordinance update, pursue acquisition and incentives, and provide forest stewardship plans. Forest cover protections should account for site geology, soils, topography, and vegetation to maximize retention and infiltration. (*C2*)

Protect and restore riparian vegetation to provide sources of large woody debris that can contribute to creation of pools.

Basinwide:

- Offer regulatory flexibility and incentives to encourage property owners to restore riparian function and remove impervious areas during redevelopment of public or private properties. (*C6, C7*)
- Expand outreach to streamside property owners about shoreline landscape design, maintenance, and streambank armoring alternatives. Convey through direct mailing of brochures (e.g., *Streamside Savvy, Going Native*); videos (*Natural Lawn Care*); shoreline homeowners kits given when home purchased; or, through workshops, including expansion of Natural Yard Care Program to include guidelines specific to shoreline residents. (*C701, C702, C709, C714, C716, C722*)

- Offer educational opportunities to landscape designers/contractors on riparian design/installation, alternatives to invasive species, and use of compost. (*C*705, *C*706, *C*707)
- Encourage neighborhood garden tours of salmon-friendly gardens to help residents visualize alternatives to traditional, less eco-friendly landscape treatments. Offer neighborhood organizers assistance with publicity, signage, and volunteer docents. (*C*722, *C*707)

Within Urban Growth Area:
- Protection of remaining riparian vegetation within Urban Growth Area is high priority; encourage replanting of riparian vegetation through incentives, and strictly enforce aquatic buffers and limit variances where vegetation still exists in sensitive areas. (*C*5)
- Much of the riparian land in lower reaches of the Cedar River is publicly owned. Emphasize restoration such as conifer underplanting and long-term maintenance of these properties. (*C*213, *C*209)
- Reach 2 of the Cedar River has very little riparian vegetation. Restore riparian vegetation where possible in Reach 2. (*C*204)

Outside Urban Growth Area:
- Protect intact riparian buffers in Tier 1 and Tier 2 subareas through strict enforcement of buffer regulations, and offer incentives to restore degraded habitat buffers, recognizing that majority of riparian corridor is privately owned. Support King County forestry and agriculture programs including technical and financial assistance to landowners. Protection and restoration of riparian buffer on publicly owned lands is also a priority. (*C*5, *C*7)
- In particular, protect riparian buffer behind Scott-Indian Grove levee in Reach 8. (*C*229)

Protect floodplain connectivity by limiting road crossings and bank armoring. Restore floodplain connectivity by removing structures from the floodplain, setting back or removing dikes and levees. Protect channel complexity and add large woody debris to create pools and riffles.

Basinwide:
- Limit new development in floodplains and channel migration zones; develop and apply standards which minimize impacts to salmon. State and local transportation plans should minimize new road crossings. (*C*17, *C*18)
- Do a demonstration project in publicly accessible area with riverfront property owner(s) willing to replace bulkheads, levees, or stream bank armoring with more ecologically friendly design. Project should contain elements doable by average property owner and illustrate costs and benefits. (*C*715)
- Conduct study to identify locations where large woody debris should be added to Cedar mainstem and to explore feasibility of passing large woody debris over the Landsburg dam. (*C*601, *C*260)
- Increase public awareness about the value of large woody debris and native vegetation for flood protection, salmon habitat, and healthy streams. Convey through media (e.g., local papers, community newsletters); signage along publicly accessible "model" shoreline; brochures such as King County's *Large Woody Debris and River Safety*; and other outreach venues such as festivals, local cable channels, and the Cedar River Naturalists program. (*C*716)

Within Urban Growth Area:
- Explore redevelopment and restoration options in Reach 2 and 3, particularly in area of industrial use in Reach 3 that is likely to be redeveloped in the near future. Jurisdictions could

offer regulatory flexibility or other incentives to encourage buffer and floodplain improvements during redevelopment. (C204, C206)
- Study options to protect in-stream habitat in Reach 4 (which has extensive large woody debris) and reduce flooding and erosion in Ron Regis Park (such as adding setback levee and large woody debris for bank stability). (C213, C214)
- Explore opportunities to remove impervious surface area and bank hardening, and restore riparian buffer in area of multi-family residential use in Reach 3. (C207)
- Explore opportunities for flood buyout in the Maplewood neighborhood in Reach 3 and restore floodplain. (C208)

Outside Urban Growth Area:
- Continue Cedar River Legacy Program to protect best remaining habitat:
  - Protect Jones Reach - 29 acres, 16 parcels targeted in Reach 8. (C228)
  - Protect Belmondo Reach - 71 acres, 10 parcels with no levees, numerous side-channels, braided channel in Reach 9. (C232)
  - Protect 5-acre parcel including 218th Place side-channel across from Taylor Creek confluence in Reach 11. (C244)
  - Protect Mouth of Taylor Creek Reach - acquire ~40 acres of forested riparian floodplain associated with both the Cedar mainstem and the lower Taylor Creek in Reach 11. (C245)
  - Protect Landsburg Reach - 87 acres, including forested floodplain and areas of unarmored, steep bank in Reach 18. (C263)
  - Protect Royal Bend - protect ~7 parcels, riverfront and floodplain (spans Reach 12-13). (C247, C249)
  - Cedar Rapids Reach - acquire ~15 acres, remove levee and restore floodplain in Reach 7. (C222, C224)
- Continue Bucks Curve buyouts and restore floodplain in Reach 5. (C215)
- Restore side-channel on Renton Lions Club in Reach 10. (C233)
- Carry out Dorre Don area flood buyouts and floodplain restoration in Reach 14. (C252)

Protect and restore water quality from fine sediments, metals, low dissolved oxygen, and high temperatures.

Basinwide:
- Jurisdictions should adopt and enforce stormwater regulations and best management practices, consistent with Washington Department of Ecology's 2001 Stormwater Management Manual (or beyond), as part of the NPDES Phase 1 and Phase 2 permit requirements. These regulations and BMPs should reduce sediment inputs from bed-scouring high flows and from non-point sources, including roads, development, agriculture, and other activities. Water quality problems should be addressed through stormwater programs (including low impact development BMPs), current and future TMDLs, livestock programs, and upgrade of stormwater facilities (where possible). (C12)
- Explore options to improve stormwater management in developed areas, e.g., through development of regional stormwater facilities and natural drainage systems (e.g., SEA Streets). Promote stormwater best management practices related to parking lot cleaning, storm drain maintenance and road cleaning. (C13)
- State/local transportation departments should address runoff from all roads and retrofit existing roads as part of major maintenance, expansion or upgrade projects; road maintenance actions should be consistent with Tri-County guidelines. Stormwater impacts from major transportation projects (for new and expanded roadways proposed during the next ten years) should be

addressed. Washington Department of Transportation should improve stormwater management on SR 169. (C14, C15, C16)

- Coordinate with local business community and non-profits to encourage the use of commercial car washes and carwash kits. Reprint and distribute water quality poster series depicting impacts of everyday practices: washing car, driving car without maintenance, leaving pet wastes unattended, and improperly using lawn chemicals. (C710)
- Publicize emergency call numbers for public to report water quality and quantity problems, non-permitted vegetation clearing, and non-permitted in-stream grading and wood removal incidents. (C713)

Provide adequate stream flow to allow upstream migration and spawning.

Basinwide:

- Work with Washington Department of Ecology and local health departments on regulations, incentives, and education related to impact of surface and groundwater withdrawals, including illegal withdrawals and exempt wells. Determine where illegal surface water withdrawals are occurring and follow-up with enforcement to ensure withdrawals do not continue. (C22)
- Work with City of Seattle, Cedar River Instream Flow Commission, and other stakeholders on policies, procedures and research related to effects of flow on habitat restoration. (C23)
- Address flow issues through other regulations/programs including: critical aquifer recharge area protections, land use regulations, groundwater management plans, stormwater regulations, and best management practices for infiltration, low impact development, etc. (C19, C21, C20)
- Promote availability of water conservation education and incentive programs (e.g., rebates for efficient toilets, free landscape irrigation audits) to decrease household, commercial, and landscaping irrigation water consumption throughout WRIA 8. (C24, C708)

Additional action approved by the Steering Committee in response to public comment:

- Protect Dorre Don Meanders Reach – acquire ~71 acres in Reach 13 and 14 (C250, C253).

NOTE: South Lake Washington actions have been identified as important to the Cedar population. Please see the Action Start-List for Migratory Areas.

TIER 2 SUBAREAS

Availability of high-quality habitat in Tier 2 subareas is necessary to reduce the risk of natural disturbances that could impact spawning areas in the mainstem Cedar. In addition, the Upper Cedar provides increased spatial distribution for spawners.

Upper Cedar River:

- Study where and how to add large woody debris to upper Cedar River mainstem and implement program. Must address dam safety in large woody debris placement. (C607)

Rock Creek:

- Provide enhanced flows for pre-spawning migrants - Work with the City of Kent to establish instream flows that are protective of Chinook through their Habitat Conservation Plan process. Investigate and address other impacts to flows through stormwater management (e.g., low impact development), education and enforcement (e.g., for illegal and exempt withdrawals), etc. (C73, C75, C76, C80, C351)

- Floodplain restoration near mouth – Buy out house on right bank, remove bank hardening, add large woody debris, and restore riparian vegetation (remove non-native plants and replant with native vegetation). (C341)

Taylor Creek:

- Adopt and enforce stormwater regulations and best management practices to reduce stormwater flows that have increased bed scour and deposition of fine sediments. Flashy flows should be addressed through forest cover retention, low impact development techniques, erosion control during construction, improved stormwater management on new and existing roads. (C64)
- Lower Taylor Creek floodplain restoration (Reach 2) - Relocate 800 feet of stream away from Maxwell Road, restore floodplain wetlands and off-channel habitat, place large woody debris, and restore riparian vegetation. (C333)